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# SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2022

(CUCBCSS-UG)

## CC17U BCS6 B16a - SYSTEM SOFTWARE

(Computer Science - Core Course)

(2017, 2018 Admissions – Supplementary/Improvement)

Time: Three Hours Maximum: 80 Marks

### PART A

Answer *all* questions. Each question carries 1 mark.

- 1. What converts an Assembly Language program into machine code?
- 2. What does the Symbol table contain?
- 3. Define a macro.
- 4. What are loaders?
- 5. What is the purpose of program counter?
- 6. What are parse trees?
- 7. What is an interpreter?
- 8. What is a Compiler?
- 9. What are binders?
- 10. Expand YACC.

 $(10 \times 1 = 10 \text{ Marks})$ 

#### PART B

Answer *all* questions. Each question carries 3 marks.

- 11. Write a short note on various types of System Softwares.
- 12. Write about Nested Macros.
- 13. Make a distinction between Loader and Linker.
- 14. What is meant by program relocation?
- 15. What are Overlays?

 $(5 \times 3 = 15 \text{ Marks})$ 

### PART C

Answer any *five* questions. Each question carries 5 marks.

- 16. Write a short note on intermediate code generator.
- 17. What are dynamic binders?
- 18. Explain about forward reference problem.
- 19. Briefly explain the design of two pass assembler.

- 20. Write the functions of an Operating System.
- 21. Write a short note on Syntax tree.
- 22. Give the features of macros.
- 23. Give a short note note on the major classes of binders.

 $(5 \times 5 = 25 \text{ Marks})$ 

### PART D

Answer any *three* questions. Each question carries 10 marks.

- 24. Give a detailed account on different Language Translators.
- 25. Draw the design of a macro processor and explain its functions.
- 26. Explain different code optimization techniques in detail.
- 27. Explain the various types of Loader schemes.
- 28. Explain the different phases of a compiler in detail.

 $(3 \times 10 = 30 \text{ Marks})$ 

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